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December 18, 2007

Mr. Dominic Weatherill
Georgia Environmental Protection Division
Industrial Wastewater Unit
4220 International Parkway – Suite 101
Atlanta, Georgia 30354



RE: Plant Scherer
NPDES Permit No. GA0035564
Supplemental information, Form 2D
Amendment to Renewal Application

Dear Mr. Weatherill:

On December 7, 2007, Georgia Power Company submitted an amendment to the application to renew the Plant Scherer NPDES permit, Number GA0035564. As requested by Mr. Hopkins of your staff, we are submitting the following supplemental documents for that amendment:

1. A completed Form 2D regarding the new waste streams associated with the Flue Gas Desulfurization (FGD) equipment.
2. A second page of the NPDES line diagram providing additional details of the FGD waste streams with respect to existing NPDES features.
3. A drawing showing the physical location of the future gypsum storage facility, from which Outfall 15 would discharge emergency overflow to Berry Creek in the event of a storm event exceeding a 100-year, 24-hour storm event.

If you need additional information or have questions regarding this matter, please contact Bill Evans at 404-506-7031.

Sincerely,

A handwritten signature in black ink that reads "Tanya D. Blalock".

Tanya D. Blalock
Environmental Manager, Water and Waste Programs

WRE/

Form 2D Instructions

Form 2D must be completed in conjunction with EPA Form 3510-1 (Form 1)

This form must be completed by all applicants who checked "yes" to Item II-D in Application Form 1. However, facilities which discharge only nonprocess wastewater that is not regulated by an effluent limitations guideline or new source performance standard may use EPA Form 3510-2E (Form 2E). Educational, medical, and commercial chemical laboratories should use this form or EPA Form 3510-2C (Form 2C) to further determine if you are a new source or a new discharger, see §122.2 and §122.29. This form should not be used for discharges of storm-water runoff.

Public Availability of Submitted Information

You may not claim as confidential any information required by this form or Form 1, whether the information is reported on the forms or in an attachment. Section 402(j) of the CWA requires that all permit applications shall be available to the public. This information will therefore be made available to the public upon request.

You may claim as confidential any information you submit to EPA which goes beyond that required by this form and Form 1. Confidentiality claims for effluent data must be denied. If you do not assert a claim of confidentiality at the time of submitting the information, EPA may make the information public without further notice. Claims of confidentiality will be handled in accordance with EPA's business confidentiality regulations in 40 CFR Part 2.

Completeness

Your application will not be considered complete unless you answer every question on this form and on Form 1 (except as instructed below). If an item does not apply to you, enter "NA" (for "not applicable") to show that you considered the question.

Follow-up Requirements

Although you are now required to submit estimated data on this form (Form 2D), please note that no later than two years after you begin discharging from the proposed facility, you must complete and submit Items V and VI of NPDES application Form 2C (EPA Form 3510-2C). However, you need not complete those portions of Item V requiring tests which you have already performed under the discharge monitoring requirements of your NPDES permit. In addition, the permitting authority may waive requirements of Items V-A and VI if the permittee makes the demonstrations required under 40 CFR §122.22(g)(7)(i)(B) and 122.21(g)(9).

Definitions

All significant terms used in these instructions and in the form are defined in the glossary found in the General Instructions which accompany Form 1.

Item I

You may use the map you provided for Item XI of Form 1 to determine the latitude and longitude (to the nearest 15 seconds) of each of your outfalls and the name of the receiving water. You should name all waters to which discharge is made and which flow into significant receiving waters. For example, if the discharge is made to a ditch which flows into an unnamed tributary which in turn flows into a named river, you should provide the name or description (if no name is available) of the ditch, the tributary, and the river.

Item II

This item requires your best estimate of the data on which your facility or new outfall will begin to discharge.

Item III-A

List all outfalls, their source (operations contributing to the flow), and estimate an average flow from each source. Briefly describe the planned treatment for these wastewaters prior to discharge. Also describe the ultimate disposal of any solid or liquid wastes not discharged. You should describe the treatment in either a narrative form or list the proper code for the treatment unit from a list provided in Table 2D-1.

Item III-B

An example of an acceptable line drawing appears in Figure 2D-1 to these instructions. The line drawing should show the route taken by water in your proposed facility from intake to discharge. Show all sources of wastewater, including process and production areas, sanitary flows, cooling water, and storm water runoff. You may group similar operations into a single unit, labeled to correspond to the more detailed listing in Item III-A. The water balance should show estimates of anticipated average flows. Show all significant losses of water to production, atmosphere, and discharge. You should use your best estimates.

Item III-C

Fill in every applicable column in this item for each source of intermittent or seasonal discharge. Base your answers on your best estimate. A discharge is intermittent if it occurs with interruptions during the operating hours of the facility. Discharges caused by routine maintenance shutdowns, process changes, or other similar activities are not considered to be intermittent. A discharge is seasonal if it occurs only during certain parts of the year. The reported flow rate is the highest daily value and should be measured in gallons per day. Maximum total volume means the total volume of any one discharge within 24 hours and is measured in units such as gallons.

Item IV

"Production" in this question refers to those goods which the proposed facility will produce, not to "waste-water" production. This information is only necessary where production-based new source performance standards (NSPS) or effluent guidelines apply to your facility. Your estimated production figures should be based on a realistic projection of actual daily production level (not designed capacity) for each of the first three operating years of the facility. This estimate must be a long-term-average estimate (e.g., average production on an annual basis). If production will vary depending on long-term shifts in operating schedule or capacity, the applicant may report alternate production estimates and the basis for the alternate estimates.

If known, report quantities in the units of measurement used in the applicable NSPS or effluent guideline. For example, if the applicable NSPS is expressed as "trams of pollutant discharged per kilogram of unit production," then report maximum **"Quantity Per Day"** in kilograms. If you do not know whether any NSPS or effluent guideline applies to your facility, report quantities in any unit of measurement known to you. If an effluent guideline or NSPS specifies a method for estimating production, that method must be followed.

There is no need to conduct new studies to obtain these figures; only data already on hand are required. You are not required to indicate how the reported information was calculated.

Items V-A, B, and C

These items require you to estimate and report data on the pollutants expected to be discharged from each of your outfalls. Where there is more than one outfall, you should submit a separate Item V for each outfall. For Part C only a list is required. Sampling and analysis are not required at this time. If, however, data from such analyses are available, then those data should be reported. Each part of this item addresses a different set of pollutants or parameters and must be completed in accordance with the specific instructions for that part. The following are the general and specific instructions for Items V-A through V-C.

Item V - General Instructions

Each part of this item requires you to provide an estimated maximum daily and average daily value for each pollutant or parameter listed (see Table 2D-2), according to the specific instructions below. The source of the data is also required.

For parts A through C, base your determination of whether a pollutant will be present in your discharge on your knowledge of the proposed facility's raw,

materials, maintenance chemicals, intermediate and final products, byproducts, and any analyses of your effluent or of any similar effluent. You may also provide the determination and the estimates based on available in-house or contractor's engineering reports of any other studies performed on the proposed facility (see Item VI of the form). If you expect a pollutant to be present solely as a result of its presence in your intake water, please state this information on the form.

Please note that no later than 2 years after you begin discharging from the proposed facility, you must complete and submit Items V and VI of NPDES application Form 2C (follow-up data).

Reporting Intake Data. You are not required to report pollutants or parameters present in intake water unless you wish to demonstrate your eligibility for a "net" effluent limitation for these pollutants or parameters, that is, an effluent limitation adjusted to provide allowance for the pollutants or parameters present in your intake water. If you wish to obtain credits for pollutants or parameters present in your intake water, please insert a separate sheet, with a short statement of why you believe you are eligible [see §122.45(g)], under Item VII (Other Information). You will then be contacted by the permitting authority for further instructions.

All estimated pollutant or parameter levels must be reported as concentration and as total mass, except for discharge flow, temperature, and pH. Total mass is the total weight of pollutants or parameters discharged over a day.

Use the following abbreviations for units:

Concentration	Mass
ppm parts per million	lbs..... pounds
mg/l milligrams per liter	ton tons (English tons)
ppb parts per billion	mg milligrams
Ug/l..... micrograms per liter	g grams
kg kilograms	T Tonnes (metric tons)

Source

In providing the estimates, use the codes in the following table to indicate the source of such information in column 4 of Parts V - A and - B.

Code

Engineering study.....	1
Actual data from pilot plants.....	1
Estimates from other engineering studies.....	2
Data from other similar plants.....	3
Best professional estimates.....	4
Others.....	specify on the form

Item V-A

Estimates of data on pollutants or parameters in Group A must be reported by all applicants for all outfalls,

outfalls containing only noncontact cooling water or nonprocess wastewater.

To request a waiver from reporting any of these pollutants or parameters, the applicant must submit to the permitting authority a written request specifying which pollutants or parameters should be waived and the reasons for requesting such a waiver. This request should be submitted to the permitting authority before or with the permit application. The permitting authority may waive the requirements for information about these pollutants or parameters if he or she determines that less stringent reporting requirements are adequate to support issuance of the permit. No extensive documentation will normally be needed, but the applicant should contact the permitting authority if she or he wishes to receive instructions on what his or her particular request should contain.

Item V-B

Estimates of data on pollutants in Group B must be reported by all applicants for all outfalls, including outfalls containing only noncontact cooling water or nonprocess wastewater. You are merely required to report estimates for those pollutants which you know or have reason to believe will be discharged or which are limited directly by an effluent limitations guideline (or NSPS) or indirectly through promulgated limitations on an indicator pollutant. The priority pollutants in Group B are divided into the following three sections:

- 1) Metal toxic pollutants, total cyanide, and total phenols
- 2) 2,3,7,8-Tetrachlorodibenzo-P-Dioxin (TCDD) (CAS # 1764-016)
- 3) Organic Toxic Pollutants (Gas Chromatography/Mass Spectrometry Fractions)
 - a) Volatile compounds
 - b) Acid compounds
 - c) Base/neutral compounds
 - d) Pesticides

For pollutants listed in Sections 1 and 3, you must report estimates as instructed above.

For Section 2, you are required to report that TCDD may be discharged if you will use or manufacture one of the following compounds, or if you know or have reason to believe that TCDD is or may be present in an effluent:

- A. 2,4,5-trichlorophenoxy acetic acid (2,4,5-T) (CAS # 93-765);
- B. 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4, 5TP) (CAS # 93-72-1);
- C. 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate (Erbon) (CAS # 136-25-4);
- D. O,O-dimethyl O-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel) (CAS # 299-84-3);

- E. 2,4,5-trichlorophenol (TCP) (CAS # 95-95-4); or
- F. Hexachlorophene (HCP) (CAS # 70-30-4)

Small Business Exemption

If you are a "small business," you are exempt from the reporting requirement for Item V-B (section 3). You may qualify as a "small business" if you fit one of the following definitions:

- 1) Your expected gross sales will total less than \$100,000 per year for the next three years, or
- 2) in the case of coal mines, your average production will be less than 100,000 tons of coal per year.

If you are a "small business," you may submit projected sales or production figures to qualify for this exemption. The sales or production figures you submit must be for the facility which is the source of the discharge. The data should not be limited only to production or sales for the process or processes which contribute to the discharge, unless those are the only processes at your facility. For sales data, where intracorporate transfers of goods and services are involved, the transfer price per unit should approximate market prices for those goods and services as closely as possible. If necessary, you may index your sales figures to the second quarter of 1980 to demonstrate your eligibility for a small business exemption. This may be done by using the gross national product price deflator (second quarter of 1980 = 100), an index available in "National Income and Product Accounts of the United States" (Department of Commerce, Bureau of Economic Analysis).

The small business exemption applies to the GC/MS fractions (Section 3) of Item V-B only. Even if you are eligible for a small business exemption, you are still required to provide information on metals, cyanide, total phenols, and dioxin in Item V-B, as well as all of Items V-A and C.

Item V-C

List any pollutants in Table 2D-3 that you believe will be present in any outfalls and briefly explain why you believe they will be present. No estimate of the pollutant's quantity is required, unless you already have quantitative data.

Note: The discharge of pollutants listed in Table 2D-4 may subject you to the additional requirements of section 311 of the CWA (Oil and Hazardous Substance Liability). These requirements are not administered through the NPDES program. However, if you wish an exemption under 40 CFR 117.12(a)(2) from these requirements, attach additional sheets of paper to this form providing the following information:

- A. The substance and the amount of each substance which may be discharged;

- B. The origin and source of the discharge of the substance;
- C. The treatment which is to be provided for the discharge by:
 - 1. An onsite treatment system separate from any treatment system which will treat your normal discharge,
 - 2. A treatment system designed to treat your normal discharge and which is additionally capable of treating the amount of the substance identified under paragraph 1 above, or
 - 3. Any combination of the above.

An exemption from the section 311 reporting requirements pursuant to 40 CFR Part 117 for pollutants on Table 2D does not exempt you from the section 402 reporting requirements pursuant to 40 CFR Part 122 (Item V-C) for pollutants listed on Table 2D-3.

For further information on exclusions from Section 311, see 40 CFR Section 117.12(a)(2) and (c), or contact your EPA Regional Office (Table 1 in the Form 1 instructions).

Item VI-A

If an engineering study was conducted, check the box labeled "report available." If no study was done, check the box labeled "no report."

Item VI-B

Report the name and location of any existing plant(s) which (to the best of your knowledge) resembles your planned operation with respect to items produced, production process, wastewater constituents, or wastewater treatment. No studies need to be conducted to respond to this item. Only data which are already available need be submitted.

This information will be used to inform the permit writer of appropriate treatment methods and their associated permit conditions and limits.

Item VII

A space is provided for additional information which you believe would be useful in setting permit limits, such as additional sampling. Any response is optional.

Item VIII

The Clean Water Act provides for severe penalties for submitting false information on this application form.

Section 309(c)(2) of the Clean Water Act provides that "Any person who knowingly makes any false statement, representation, or certification in any application, . . . shall upon conviction, be punished by a fine of no more than \$10,000 or by imprisonment for not more than six months, or both."

40 CFR Part 122.22 Requires the Certification To Be Signed as Follows:

- A. For a corporation: by a responsible corporate officer

A responsible corporate officer means (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25,000,000 (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

- B. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
- C. For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

PHYSICAL TREATMENT PROCESSES

1-A	Ammonia Stripping	1-M	Grit Removal
1-B	Dialysis	1-N	Microstraining
1-C	Diatomaceous Earth Filtration	1-O	Mixing
1-D	Distillation	1-P	Moving Bed Filters
1-E	Electrodialysis	1-Q	Multimedia Filtration
1-F	Evaporation	1-R	Rapid Sand Filtration
1-G	Flocculation	1-S	Reverse Osmosis (<i>Hyperfiltration</i>)
1-H	Flotation	1-T	Screening
1-I	Foam Fractionation	1-U	Sedimentation (<i>Settling</i>)
1-J	Freezing	1-V	Slow Sand Filtration
1-K	Gas-Phase Separation	1-W	Solvent Extraction
1-L	Grinding (<i>Comminutors</i>)	1-X	Sorption

CHEMICAL TREATMENT PROCESSES

2-A	Carbon Adsorption	2-G	Disinfection (<i>Ozone</i>)
2-B	Chemical Oxidation	2-H	Disinfection (<i>Other</i>)
2-C	Chemical Precipitation	2-I	Electrochemical Treatment
2-D	Coagulation	2-J	Ion Exchange
2-E	Dechlorination	2-K	Neutralization
2-F	Disinfection (<i>Chlorine</i>)	2-L	Reduction

BIOLOGICAL TREATMENT PROCESSES

3-A	Activated Sludge	3-E	Preaeration
3-B	Aerated Lagoons	3-F	Spray Irrigation/Land Application
3-C	Anaerobic Treatment	3-G	Stabilization Ponds
3-D	Nitrification-Denitrification	3-H	Trickling Filtration

OTHER PROCESSES

4-A	Discharge to Surface Water	4-C	Reuse/Recycle of Treated Effluent
4-B	Ocean Discharge Through Outfall	4-D	Underground Injection

SLUDGE TREATMENT AND DISPOSAL PROCESSES

5-A	Aerobic Digestion	5-M	Heat Drying
5-B	Anaerobic Digestion	5-N	Heat Treatment
5-C	Belt Filtration	5-O	Incineration
5-D	Centrifugation	5-P	Land Application
5-E	Chemical Conditioning	5-Q	Landfill
5-F	Chlorine Treatment	5-R	Pressure Filtration
5-G	Composting	5-S	Pyrolysis
5-H	Drying Beds	5-T	Sludge Lagoons
5-I	Elutriation	5-U	Vacuum Filtration
5-J	Flotation Thickening	5-V	Vibration
5-K	Freezing	5-W	Wet Oxidation
5-L	Gravity Thickening		

GROUP A

Biochemical Oxygen Demand (BOD)
Chemical Oxygen Demand (COD)
Total Organic Carbon (TOC)
Total Suspended Solids (TSS)
Flow

Ammonia (as N)
Temperature (winter)
Temperature (summer)
pH

GROUP B

Bromide
Total Residual Chlorine
Color
Fecal Coliform
Fluoride
Nitrate-Nitrite (as N)
Oil and Grease
Phosphorus (as P) Total
Radioactivity
 (1) Alpha, Total
 (2) Beta, Total
 (3) Radium, Total
 (4) Radium 226, Total

Sulfate (as SO₄)
Sulfide (as S)
Sulfite (as SO₃)
Surfactants
Aluminum, Total
Barium, Total
Boron, Total
Cobalt, Total
Iron, Total
Magnesium, Total
Molybdenum, Total
Manganese, Total
Tin, Total
Titanium, Total

Section 1

Antimony, Total
Beryllium, Total
Chromium, Total
Lead, Total
Nickel, Total
Silver, Total
Zinc, Total
Phenols, Total

Arsenic, Total
Cadmium, Total
Copper, Total
Mercury, Total
Selenium, Total
Thallium, Total
Cyanide, Total

Section 2

2,3,7,8-Tetrachlorodibenzo-P-Dioxin

GC/MS FRACTION* - VOLATILE COMPOUNDS

Arcolein
Benzene
Carbon Tetrachloride
Chlorodibromomethane
2-Chloroethylvinyl Ether
Dichlorobromomethane
1,2-Dichloroethane
1,2-Dichloropropane
Ethylbenzene
Methyl Chloride
1,1,2,2-Tetrachloroethane
Toluene
1,1,1-Trichloroethane
Trichloroethylene

Vinyl Chloride
Acrylonitrile
Bromoform
Chlorobenzene
Chloroethane
Chloroform
1,1-Dichloroethane
1,1-Dichloroethane
1,3-Dichloropropylene
Methyl Bromide
Methylene Chloroethane
Tetrachloroethylene
1,2-Trans-Dichloroethylene
1,1,2-Trichloroethane

GS/MS FRACTION -ACID COMPOUNDS

2-Chlorophenol
2,4-Dimethylphenol
2,4-Dinitro-phenol
4-Nitrophenol
pentachlorophenol
2,4,6-Trichlorophenol

2,4-Dichlorophenol
4,6-Dinitro-O-Cresol
2-Nitrophenol
P-Chloro-M-Cresol
Phenol

GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS

Acenaphthene
Anthracene
Benzo (a) Anthracene
3,5-Benzofluoranthene
Benzo (k) Fluoranthene
Bis (2-Chloroethyl) Ether Bis
Bis (2-Ethylhexyl) Phthalate
Butyl Benzyl Phthalate
4-Chlorophenyl Phenyl Ether
Dibenzo (a,h) Anthracene
1,3-Dichlorobenzene
3,3-Dichlorobenzidine
Dimethyl Phthalate
2,4-Dinitrotoluene
Di-N-Octyl Phthalate
Fluoranthene
Hexachlorobenzene
Hexachlorocyclopentadiene
Indeno (1,2,3-cd) Pyrene
Naphthalene
N-Nitro-soldimethylamine
N-Nitro-sodiphenylamine
Pyrene

Acenaphtylene
Benzidine
Benzo (a) Pyrene
Benzo (ghi) Perylene
Bis (2 Chloroethoxy) Methane
(2-Chloroisopropyl) Ether
4-Bromophenyl Phenyl Ether
2-Chloronaphthalene
Chrysene
1,2-Dichlorobenzene
1,4-Dichlorobenzene
Diethyl Phthalate
Di-N-Butyl Phthalate
2,6-Dinitrotoluene
1,2, Diphenylhydrazine (as Azobenzen)
Fluorene
Hexachlorobutadiene
Hexachloroethane
Isophorone
Nitrobenzene
N-Nitrosodi-N-Propylamine
Phenanthrene
1,2,4-Trichlorobenzene

GC/MS FRACTION - PESTICIDES

Aldrin
Alpha-BHC
Beta-BHC
4,4' DDT
4,4'-DDD
Alpha-Endosulfan
Endosulfan Sulfate
Endrin Aldehyde
Heptachlor Epoxide
PCB-1254
PCB-1232
PCB-1260
Toxaphene

Gamma-BHC
Delta-BHC
Chlordane
4,4' DDE
Dieldrin
Beta-Endosulfan
Endrin
Heptachlor
PCB-1242
PCB-1221
PCB-1248
PCB-1016

*fractions defined in 40 CFR Part 136

TOXIC POLLUTANTS AND HAZARDOUS SUBSTANCES REQUIRED TO BE IDENTIFIED BY APPLICANTS IF EXPECTED TO BE PRESENT

TOXIC POLLUTANT

Asbestos

HAZARDOUS SUBSTANCES

Acetaldehyde
 Allyl alcohol
 Allyl chloride
 Amyl acetate
 Aniline
 Benzonitrile
 Benzyl chloride
 Butyl acetate
 Butylamine
 Captan
 Carbaryl
 Carbofuran
 Carbon disulfide
 Chlorpyrifos
 Coumpahos
 Cresol
 Crotonaldehyde
 Cyclohexane
 2,4-D (2,4-Dichlorophenoxyacetic acid)
 Diazinon
 Dicamba
 Dichlobenil
 Dichlone
 2,2 Dichloropropionic acid
 Dichlorvos
 Diethyl amine
 Dimethyl amine
 Dinitrobenzene
 Diquat
 Disulfoton
 Diuron
 Epichlorohydrin
 Ethion
 Ethylene diamine
 Formaldehyde
 Furfural
 Guthion
 Isoprene
 Isopropanolamine dodecylbenzenesulfonate
 Kelthane
 Kepone
 Malathion
 Mercaptodimethur
 Methoxychlor

HAZARDOUS SUBSTANCES

Methyl mercaptan
 Methyl methacrylate
 Methyl parathion
 Mevinphos
 Mexacarbate
 Monoethyl amine
 Monomethyl amine
 Naled
 Naphthenic acid
 Nitrotoluene
 Parathion
 Phenolsulfonate
 Phosgene
 Propargite
 Propylene oxide
 Pyrethrins
 Quinoline
 Resorcinol
 Strontium
 Strychnine
 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)
 TDE (Tetrochlorodiphenyl ethane)
 2,4,5-TP [2-(2,4,5-Trichlorophenoxy) propanic acid]
 Trichlorofon
 Triethanolamine dodecylbenzenesulfonate
 Triethylamine
 Uranium
 Vanadium
 Vinyl acetate
 Xylene
 Xylenol
 Zirconium

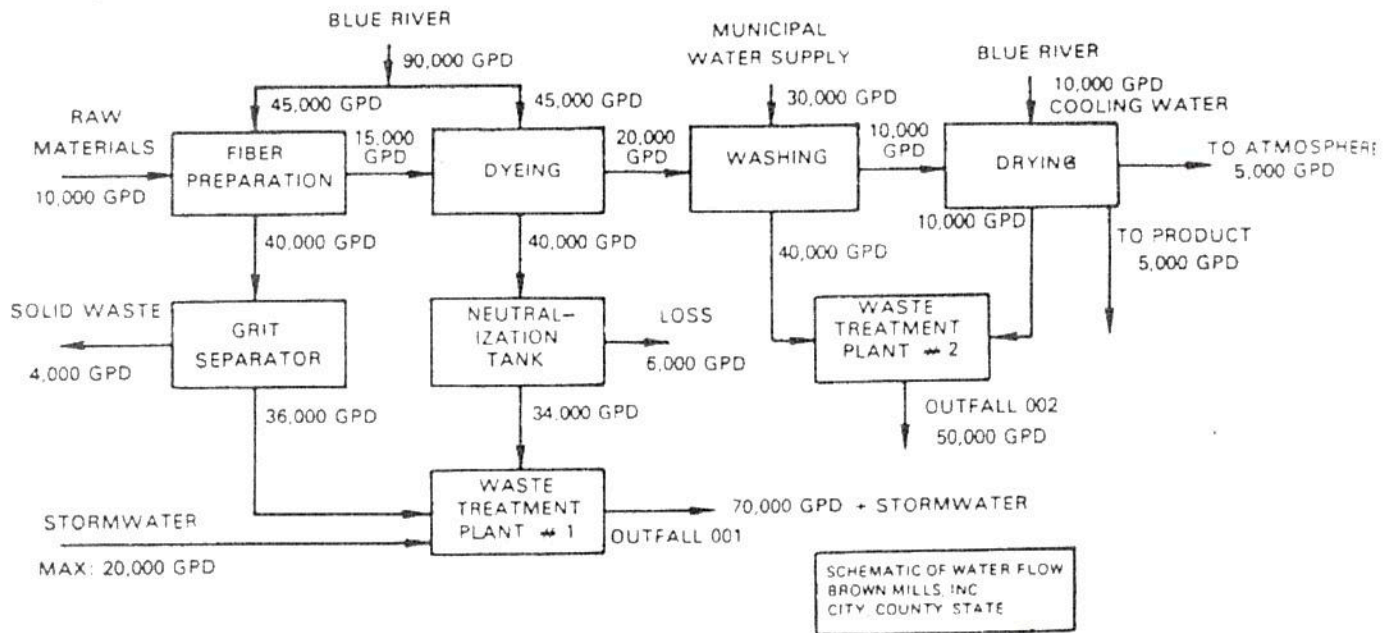
HAZARDOUS SUBSTANCES

Acetaldehyde	Butylamine	Dichlorvos
Acetic acid	Butyric acid	Dieldrin
Acetic anhydride	Cadmium acetate	Diethylamine
Acetone cyanohydrin	Cadmium bromide	Dimethylamine
Acetyl bromide	Cadmium chloride	Dinitrobenzene
Acetyl chloride	Calcium arsenate	Dinitrophenol
Acrolein	Calcium arsenite	Dinitrotoluene
Acrylonitrile	Calcium carbide	Diquat
Adipic acid	Calcium chromate	Disulfoton
Aldrin	Calcium cyanide	Diuron
Allyl alcohol	Calcium dodecylbenzenesulfonate	Dodecylbenzenesulfonic acid
Alyll chloride	Calcium hypochlorite	Endosulfan
Aluminum sulfate	Captan	Endrin
Ammonia	Carbaryl	Epichlorohydrin
Ammonium acetate	Carbofuran	Ethion
Ammonium benzoate	Carbon disulfide	Ethylbenzene
Ammonium bicarbonate	Carbon tetrachloride	Ethylenediamine
Ammonium bichromate	Chlordane	Ethylene dibromide
Ammonium bifluoride	Chlorine	Ethylene dichloride
Ammonium bisulfite	Chlorobenzene	Ethylene diaminetetracetic acid (EDTA)
Ammonium carbamate	Chloroform	Ferric ammonium citrate
Ammonium carbonate	Chloropyrifos	Ferric ammonium exalate
Ammonium chloride	Chlorosulfonic acid	Ferric chloride
Ammonium chromate	Chromic acetate	Ferric fluoride
Ammonium citrate	Chromic acid	Ferric nitrate
Ammonium flouoroborate	Chromic sulfate	Ferric sulfate
Ammonium fluoride	Chromous chloride	Ferrous chloride
Ammonium hydroxide	Cobaltous bromide	Ferrous sulfate
Ammonium oxalate	Cobaltous formate	Formaldehyde
Ammonium silicofluoride	Cobaltous sulfamate	Formic acid
Ammonium sulfamate	Coumaphos	Fumaric acid
Ammonium sulfide	Cresol	Furfural
Ammonium silfite	Crotonaldehyde	Guthion
Ammonium tartrate	Cupric acetate	Heptachlor
Ammonium thiocyanate	Cupric acetoarsenite	Hexachlorocyclopentadiene
Ammonium thisulfate	Cupric chloride	Hydrochloric acid
Amyl acetate	Cupric nitrate	Hydrofluoric acid
Aniline	Cupric oxalate	Hydrogen cyanide
Antimony pentachloride	Cupric sulfate	Hydrogen sulfide
Antimony potassium tartrate	Cupric sulfate ammoniated	Isoprene
Antimony tribromide	Cupric tartrate	Isopropanolamine
Antimony trichloride	Cyanogen chloride	dodecylbenzenesulfonate
Antimony trifluoride	Cyclohexane	Kelthane
Antimony trioxide	2,4-D acid (2,4-Dichlorophenoxyacetic acid esters)	Kepone
Arsenic disulfide	DDT	Lead acetate
Barium cyanide	Diazinon	Lead arsenate
Benzene	Dicamba	Lead chloride
Benzoic acid	Dichlobenil	Lead fluoborate
Benzonitrite	Dichlone	Lead fluorite
Benzoyl chloride	Dichlorobenzene	Lead iodide
Benzyl chloride	Dichloropropane	Lead nitrate
Beryllium chloride	Dichloropropene	Lead stearate
Beryllium fluoride	Dichloropropene-Dichloropropane mix	Lead sulfate
Beryllium nitrate	2,2-Dichloropropionic acid	Lead sulfide
Butylacetate		Lead thiocyanate
n-Butylphthalate		Lindane
		Lithium chromate
		Malathion

HAZARDOUS SUBSTANCES (Continued)

Maleic acid	Sodium bifluoride	Zinc ammonium chloride
Maleic anhydride	Sodium bisulfite	Zinc borate
Mercaptodimethur	Sodium chromate	Zinc bromide
Mercuric cyanide	Sodium cyanide	Zinc carbonate
Mercuric nitrate	Sodium dodecylbenzenesulfonate	Zinc chloride
Mercuric sulfate	Sodium fluoride	Zinc cyanide
Mercuric thiocyanate	Sodium hydrosulfide	Zinc fluoride
Mercurous nitrate	Sodium hydroxide	Zinc formate
Methoxychlor	Sodium hypochlorite	Zinc hydrosulfite
Methyl methacrylate	Sodium methylate	Zinc nitrate
Methyl parathion	Sodium nitrate	Zinc phenolsulfonate
Mevinphos	Sodium phosphate (dibasic)	Zinc phosphide
Mexacarbate	Sodium phosphate (tribasic)	Zinc silicofluoride
Monethylamine	Sodium selenite	Zinc sulfate
Monomethylamine	Strontium chromate	Zirconium nitrate
Naled	Strychnine	Zirconium potassium fluoride
Naphthalene	Styrene	Zirconium sulfate
Naphthenic acid	Sulfuric acid	Zirconium tetrachloride
Nickel ammonium sulfate	Sulfur monochloride	
Nickel chloride	2,4,5-T acid (2,4,5-Trichlorophenoxy acetic acid)	
Nickel hydroxide	2,4,5-Tamines (2,4,5-Trichlorophenoxy acetic acid amines)	
Nickel nitrate	2,4,5-T esters (2,4,5-Trichlorophenoxy propanoic acid)	
Nickel sulfate	2,4,5-TP acid esters (2,4,5-Trichlorophenoxy propanoic acid esters)	
Nitric acid	TDE (Tetrachlorodiphenyl ethane)	
Nitrobenzene	Tetraethyl lead	
Nitrogen dioxide	Tetraethyl pyrophosphate	
Nitrophenil	Thallium sulfate	
Nitrotoluene	Toluen	
Paraformaldehyde	Toxaphene	
Parathion	Trichlorofon	
Pentachlorophenol	Trichloroethylene	
Phenol	Trichlorophenol	
Phosgene	Triethanolamine	
Phosphoric acid	dodecylbenzenesulfonate	
Phosphorus	Triethylamine	
Phosphorus oxychloride	Trimethylamine	
Phosphorus pentasulfide	Uranyl acetate	
Phosphorus trichloride	Uranyl nitrate	
Polychlorinated biphenyls (PCB)	Vanadium pentoxide	
Potassium arsenate	Vanadyl sulfate	
Potassium arsenite	Vinyl acetate	
Potassium bichromate	Vinylidene chloride	
Potassium cyanide	Xylene	
Potassium hydroxide	Xylenol	
Potassium permanganate	Zinc acetate	
Propargite		
Propionic acid		
Propionic anhydride		
Propylene oxide		
Pyrethrins		
Quinoline		
Resorcinol		
Selenium oxide		
Silver nitrate		
Sodium		
Sodium arsenate		
Sodium arsenite		
Sodium bichromate		

LINE DRAWING



B. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item III-A. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

C. Except for storm runoff, leaks, or spills, will any of the discharges described in Item III-A be intermittent or seasonal?

☒ Yes (complete the following table)

☐ No (go to Item IV)

Outfall Number	1. Frequency		2. Flow		
	a. Days Per Week (specify average)	b. Months Per Year (specify average)	a. Maximum Daily Flow Rate (in mgd)	b. Maximum Total Volume (specify with units)	c. Duration (in days)
<p>Outfall 03K, FGD Gypsum and Limestone Area Runoff will be intermittent depending on rainfall. The total discharge will be contained in the Plant Scherer Coal Pile Runoff Pond and discharged from there to the Ash Pond.</p> <p>Outfall 15, FGD Gypsum Storage Emergency Overflow, is shown on Part III as intermittent. The containment of this storage will be designed to prevent overflow unless a rainfall exceeds the statistical 100-year, 24-hour storm event for this location, which is 8.2 inches in 24 hours. In such event, the overflow will be of short duration and the receiving stream flow (Berry Creek) is anticipated to also be abnormally high. For example if the storm event is 10 inches in 24 hours, the peak emergency overflow rate would be 21 cfs and Berry Creek flow is projected to be 820 cfs.</p>	N/A	N/A	N/A	100 gpm	Less than one

IV. Production

If there is an applicable production-based effluent guideline or NSPS, for each outfall list the estimated level of production (projection of actual production level, not designed), expressed in the terms and units used in the applicable effluent guideline or NSPS, for each of the first 3 years of operation. If production is likely to vary, you may also submit alternative estimates (attach a separate sheet).

Year	a. Quantity Per Day	b. Units of Measure	c. Operation, Product, Material, etc (specify)
			Not Applicable

~~01F and 01G~~ 03J ET AL

A and B: These items require you to report estimated amounts (*both concentration and mass*) of the pollutants to be discharged from each of your outfalls. Each part of this item addresses a different set of pollutants and should be completed in accordance with the specific instruction for that part. Data for each outfall should be on a separate page. Attach additional sheets of paper if necessary.

Each part of this item requests you to provide an estimated daily maximum and average for certain pollutants and the source of information. Data for all pollutants in Group A, for all outfalls, must be submitted unless waived by the permitting authority. For all outfalls, data for pollutants in Group B should be reported only for pollutants which you believe will be present or are limited directly by an effluent limitations guideline or NSPS or indirectly through limitations on an indicator pollutant.

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- C. Use the space below to list any of the pollutants listed in Table 2D-3 of the instructions which you know or have reason to believe will be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it will be present.

1. Pollutant

None

2. Reason for Discharge

VI. Engineering Report on Wastewater Treatment

- A. If there is any technical evaluation concerning your wastewater treatment, including engineering reports or pilot plant studies, check the appropriate box below.

☐

Report Available

☒

No Report

- B. Provide the name and location of any existing plant(s) which, to the best of your knowledge, resembles this production facility with respect to production processes, wastewater constituents, or wastewater treatments.

Name

Plant Yates (Note discussion on page 5 regarding relevance of this process to the Plant Scherer Flue Gas Desulfurization process.)

Location

Newnan, Georgia

VII. Other Information (Optional)

Use the space below to expand upon any of the above questions or to bring to the attention of the reviewer any other information you feel should be considered in establishing permit limitations for the proposed facility. Attach additional sheets if necessary.

**03J - Flue Gas Desulfurization wastewater,
 03K - FGD Limestone and Gypsum Handling Area Runoff, and
 15 - Gypsum Storage Emergency overflow.**

The effluent pollutant concentrations are uncertain due to:

- (1) limited industry experience with varying processes**
- (2) variability of coals and ash constituents**
- (3) variability of effectiveness of solids removal**

Southern Company has one existing scrubber in operation from which may be derived a limited characterization of the wastewater potentially released by the Plant Scherer scrubbers. This scrubber is a joint Southern Company / Department of Energy / Electric Power Research Institute demonstration of the Chiyoda FGD technology. It is a small-scale research project on a 100 megawatt unit at Plant Yates near Newnan, Georgia. The constituents of the settled wastewater blowdown are listed in Form 2D.

The Plant Scherer process has several differences from the Yates process such that it is impossible to predict the constituents in the Scherer waste streams. The 03J effluent will pass through a gypsum settling process prior to discharge to the Ash Pond, then commingling with cooling tower blowdown and subsequent discharge through the plant Final Discharge, Outfall 01 to the Ocmulgee River. The 03K and 15 effluents are described in Part III.C above

VIII. Certification

I Certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name and Official Title (type or print)

Charles H. Huling, Vice President, Environmental Affairs

B. Phone No.

(404-) 506-7716

C. Signature

Charles H. Huling

D. Date Signed

12/17/07

Table V, Form 2D

EPA ID Number GAD 000612796

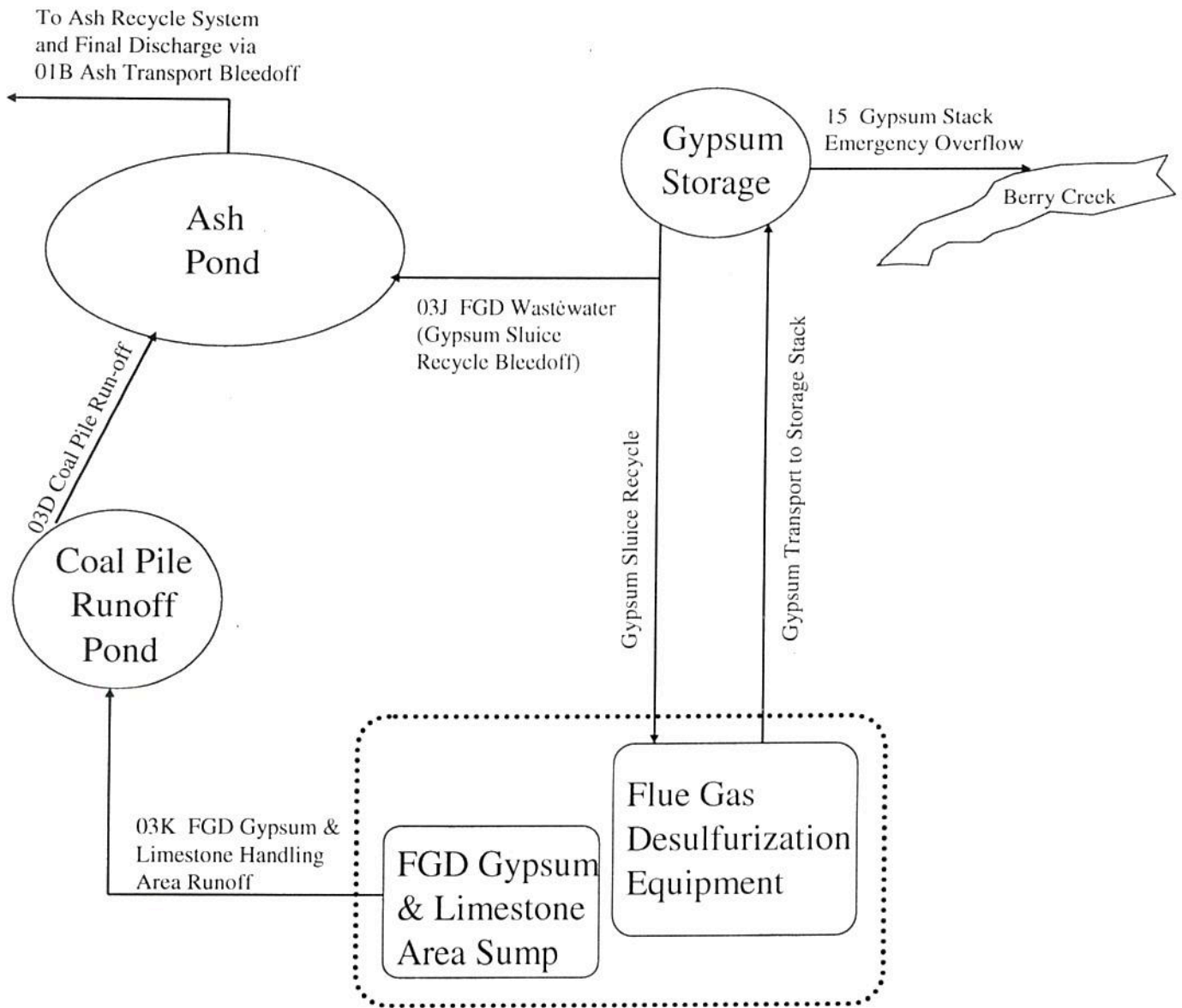
Effluent Characteristics (with caveats noted in Form 2D section VII)

Outfall 03J - FGD Wastewater

Pollutant	Units	Average Daily Value		Maximum Daily Value		Source
		Concentration	Mass (lb/day)	Concentration	Mass (lb/day)	
				All maximum concentrations assumed same as average.		
Group A						
BOD		not analyzed				
Chem Oxygen Demand		not analyzed				
Total Organic Carbon	mg/l	0.593	21.3		28.5	1
TSS	mg/l	4	144.0		192.0	1
Flow	gpm	3,000	n/a	4,000	n/a	1
Ammonia (as N)	mg/l	0.55	19.8		26.4	
Temperature (Winter)	mg/l	19	n/a		n/a	4
Temperature (Summer)	mg/l	26	n/a		n/a	4
pH	SU	4.49	n/a		n/a	1
Group B						
Bromide	mg/l	7.42	267.1		356.2	1
Chlorine, Total Residual	mg/l	0	n/a		n/a	4
Color	PCU	8	n/a		n/a	1
Fecal Coliform	MPN/100ml	0	n/a		n/a	4
Flouride	mg/l	62.3	2242.8		2990.4	1
Nitrate-Nitrite (as N)	mg/l	0.01	0.4		0.5	1
Oil and Grease	mg/l	0	0.0		0.0	4
Phosphorus (as P) Total	mg/l	0.24	8.6		11.5	1
Sulfate (as SO4)	mg/l	1549.5	55782.0		74376.0	1
Sulfide (as S)		not analyzed				
Sulfite (as SO3)		not analyzed				
Surfactants	mg/l	0	0.0		0.0	4
Aluminum, Total	mg/l	15.8	568.8		758.4	1
Barium, Total	mg/l	0.271	9.8		13.0	1
Boron, Total	mg/l	30.1	1083.6		1444.8	1
Cobalt, Total	mg/l	0.037	1.3		1.8	1
Iron, Total	mg/l	1.88	67.7		90.2	1
Magnesium, Total	mg/l	276	9936.0		13248.0	1
Molybdenum, Total	mg/l	0.031	1.1		1.5	1
Manganese, Total	mg/l	1.81	65.2		86.9	1
Tin, Total	mg/l	0.014	0.5		0.7	1
Titanium, Total	mg/l	0.107	3.9		5.1	1
Group B - Section 1						
Antimony, Total	mg/l	0.032	1.2		1.5	1
Arsenic, Total	mg/l	0.013	0.5		0.6	1
Beryllium, Total	mg/l	0.003	0.1		0.1	1
Cadmium, Total	mg/l	0.033	1.2		1.6	1
Chromium, Total	mg/l	0.076	2.7		3.6	1
Copper, Total	mg/l	0.143	5.1		6.9	1
Lead, Total	mg/l	0.004	0.1		0.2	1
Mercury, Total	mg/l	0.0289	1.0		1.4	1
Nickel, Total	mg/l	0.124	4.5		6.0	1
Selenium, Total	mg/l	0.551	19.8		26.4	1
Silver, Total	mg/l	0	0.0		0.0	1
Thallium, Total	mg/l	0.013	0.5		0.6	1
Zinc, Total	mg/l	1.7	61.2		81.6	1
Cyanide, Total		not analyzed				
Phenols, Total		not analyzed				

Notes:

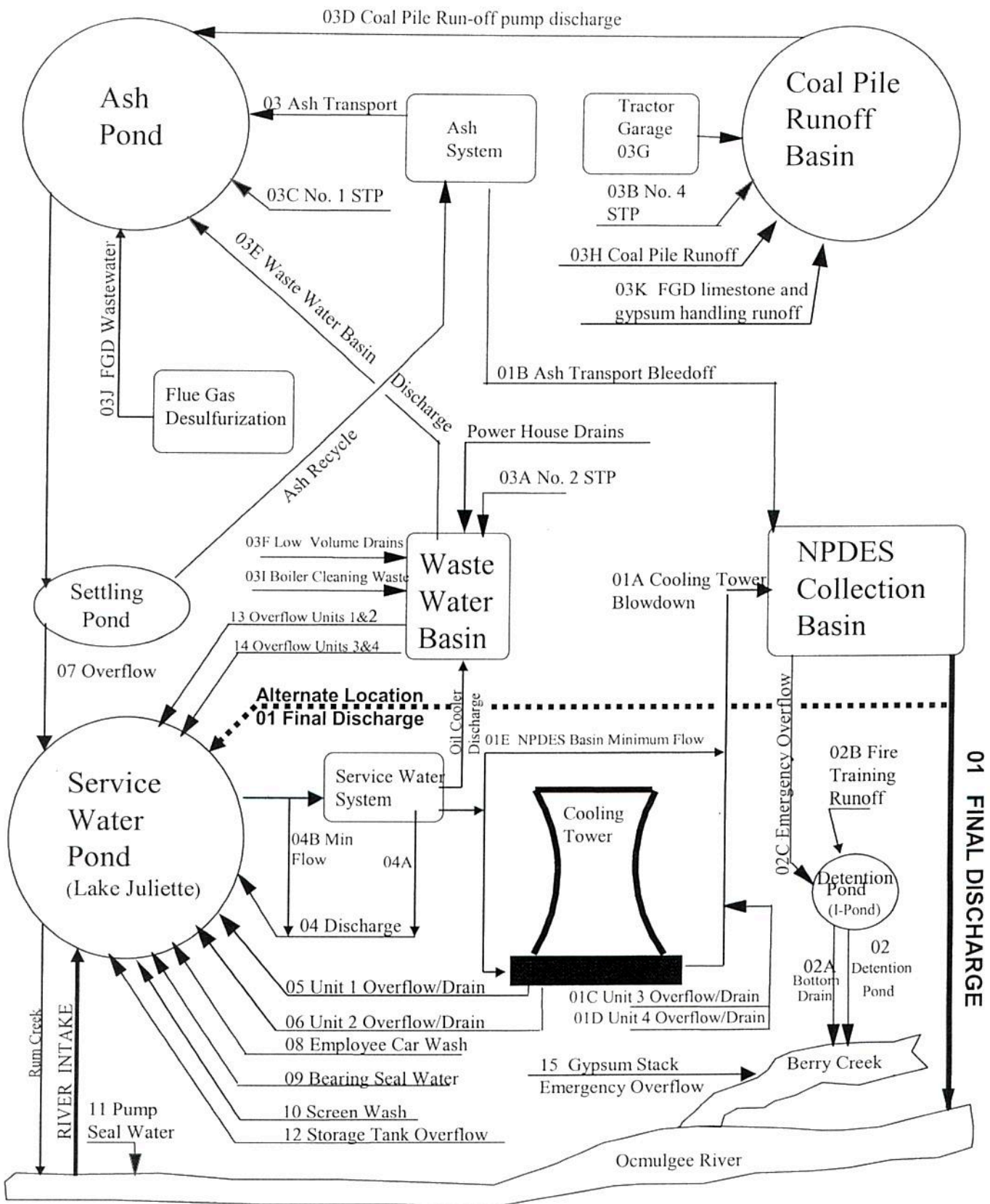
1. All other pollutants listed in Table 2D-2 are believed to be not present in these effluents.
2. Refer to Form 2D, Part VII for information regarding relevance and limitations of this data.
3. Source Code 1 indicates this data is from analyses of pilot plant wastewater as discussed in Part IV
4. Flow rates apply to the proposed Plant Scherer FGD facility (preliminary design estimates).

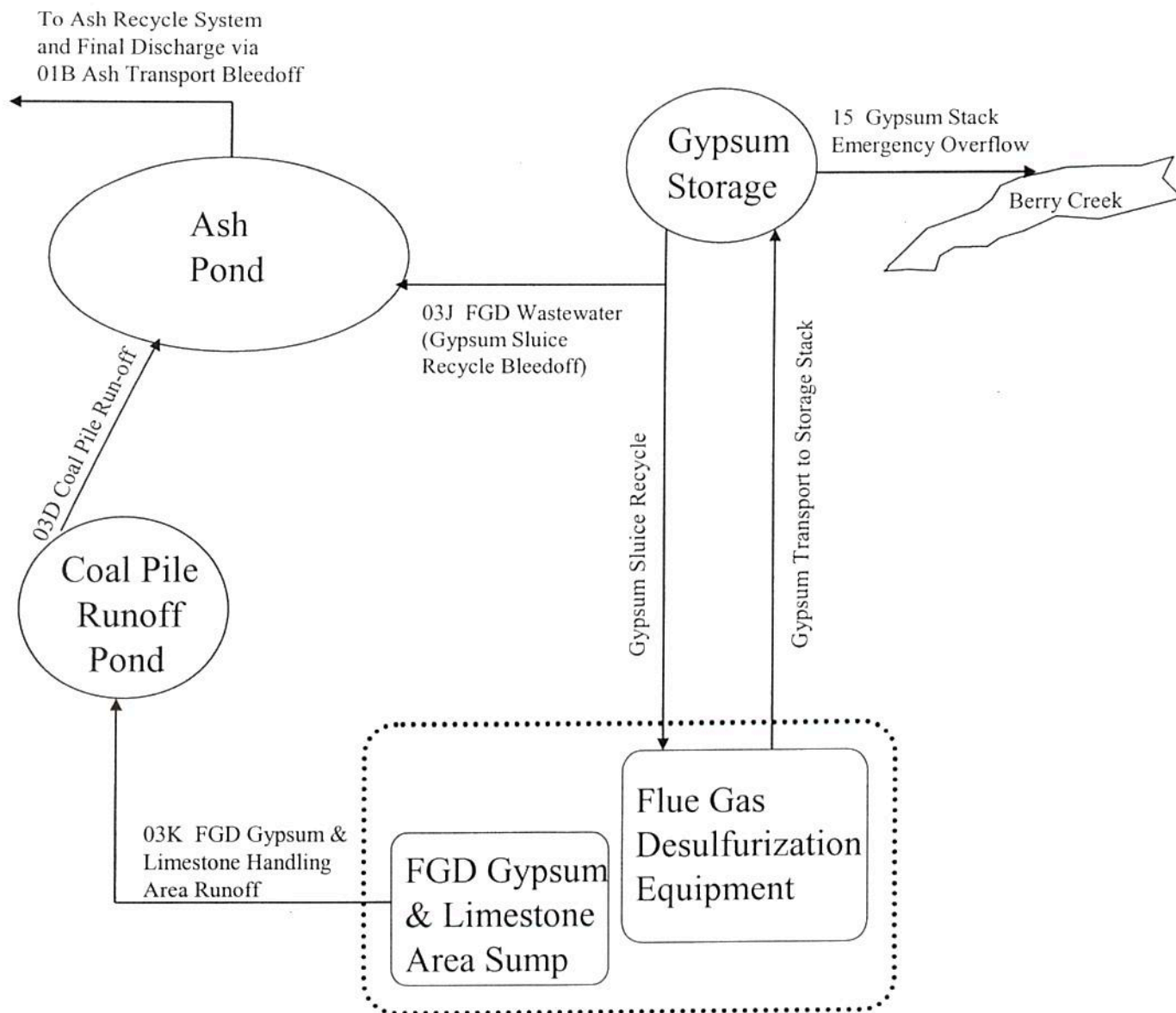


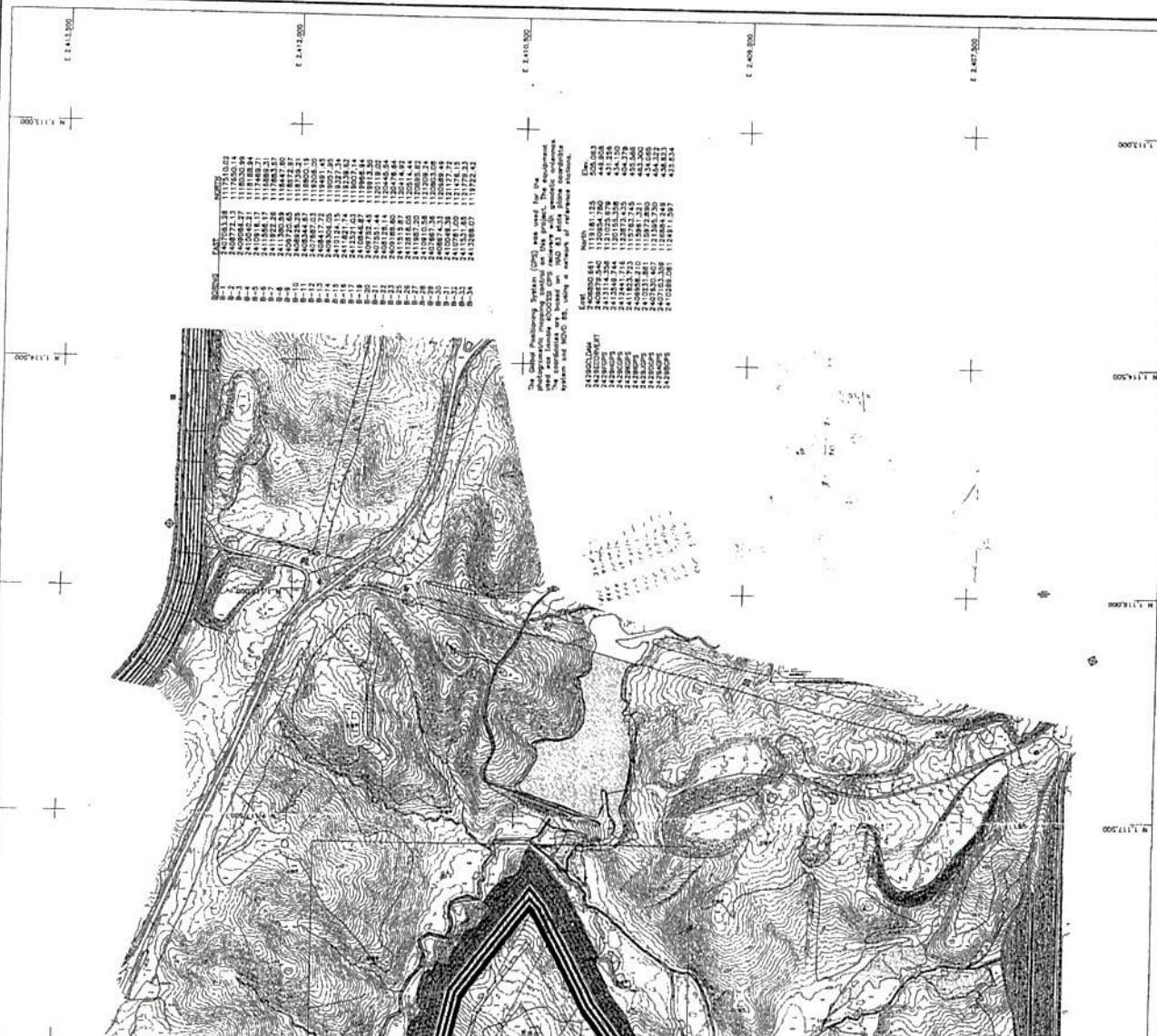
Plant Scherer NPDES Flow Diagram

NPDES Permit No. GA0026051

Dec. 2007







POINT	EAST	NORTH
1	240763.34	117151.02
2	240763.34	117151.02
3	240763.34	117151.02
4	240763.34	117151.02
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31	240763.34	117151.02
32	240763.34	117151.02
33	240763.34	117151.02
34	240763.34	117151.02

The digital positioning system (GPS) was used for the field data collection. The equipment used was a Trimble 4600XT GPS receiver. The data was collected on a 1000 Hz rate. The data was then processed using the Trimble Business Center software. The resulting coordinates are listed in the table below.

POINT	EAST	NORTH
1	240763.34	117151.02
2	240763.34	117151.02
3	240763.34	117151.02
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32	240763.34	117151.02
33	240763.34	117151.02
34	240763.34	117151.02

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THESE MAPS WERE PREPARED FOR
GEORGIA POWER COMPANY
Plant Scherer
CCB Storage Facility
DATE OF PHOTOGRAPHY: 11-20-04 TO 12-10-04

